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ABSTRACT

At the beginning of this paper what is known about the effects of maltreatment on children is described. From that discussion, a general impression of the nature and quality of current knowledge emerges, with a focus on theoretical and methodological implications. It is concluded that reports on the physical, social, emotional, and cognitive-developmental consequences of child abuse present an impression of serious and profound pathology in the victims, but that analysis of these studies demonstrates major methodological flaws that limit their generalizability, scientific validity, and utility for building theory and for guiding practice. The second section of the paper discusses the importance of theory to knowledge, prevention, and treatment of child abuse. An account of the development of child abuse research is provided. The account describes the shift in research objectives from a set of unitary theories to a set of integrative hypotheses -- a shift from a search for a single cause of child abuse to the identification of individual differences in etiology. In the final section of the paper, future research needs are identified. (Author/RH)

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MATRIX NO. 9

CHILD ABUSE:
CURRENT KNOWLEDGE AND FUTURE NEEDS FOR RESEARCH

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Introduction: Definition and Prevalence

Child abuse has been noted to have many causes: as a childhood symptom of mental illness in parents, as the culmination of a lifelong experience of violence toward the caregiver, of environmental and social stresses on the family, and of society's acceptance and promotion of physical violence. Contained in each causal explanation is a theory of etiology. And within each theory, researchers extract from the complexity of families' lives those particular factors that are believed to be causal agents for violence against children. Clinicians frequently are frustrated by the limited focus and use of the diverse theories on child abuse. In order to select which factors to study, researchers must exclude other factors. Clinicians, facing a variety of distinctive life events, personal characteristics, and unique circumstances of the families and children they serve, are not content always with the explanations for the origin of child abuse found in the research literature.

Child abuse and child neglect are catchall euphemisms for a variety of childhood injuries that are believed to be derived from parental acts of omission or commission. The diagnostic tags focus attention on symptoms and propose entirely too simple formulations of etiology. In this paper, child abuse refers to the many problems suggested by child abuse and child neglect. This is to focus more on the causes than on the manifestations of child maltreatment.

By the middle 1960s, after a model Child Abuse Reporting Law was promulgated by the U.S. Children's Bureau, every state adopted one or another form of child abuse reporting statute. In 1978, according to the National Center on Child Abuse and Neglect in the U.S. Department of Health and Human Services, over 600,000 reports were received. This represented a 10-fold increase in the course of a decade.

Although the true prevalance of child abuse is unknown, the concern regarding the consequences of abuse is for individuals and for our society universally. We address at the outset of this paper what we know of the impact of child maltreatment on the child. From this discussion will emerge a general impression of the nature and quality of our knowledge, with focus on theory and methodology of study.

The Impact of Abuse on Children

The clinical literature on child abuse contains many assumptions about the consequences of child abuse for the victim, his or her family, and society. For example, Schmitt and Kempe asserted that the dangers of child abuse extend beyond harm to the victim:[1]

> If the child who has been physically abused is returned to his parents without intervention, 5 percent are killed and 35 percent are seriously reinjured. Moreover, the untreated families tend to produce children who grow up to be juvenile delinquents and murderers, as well as the batterers of the next generation.

Such concerns on the part of clinicians derive in part from the frequently noted multigenerational nature of identified clinical cases of child abuse: the parents of abused children often themselves are perceived to have been abused and neglected in childhood.[2] In adulthood, the parents may have more frequent drug and alcohol abuse, criminal behavior and psychiatric disturbance,[3] leading to worry about what will be the fate of their offspring. Concerns about the developmental sequelae of child abuse also are supported by the observations of psychiatric workers on the behavior of small numbers of abused children in clinical and laboratory settings.[4-6]

Corroboration for these small studies is found in reports from the Select Committee on Child Abuse of the Legislature of the State of New York.[7,8] In a study of 4,465 children and siblings who were reported as victims of maltreatment in the early 1950s in eight New York counties, between 10% and 30% were identified in subsequent agency contacts for several categories of juvenile misconduct. In three counties, 44% of the girls and 35% of the boys reported to a court as delinquent or ungovernable had been reported previously as abused or neglected. The strength and stability of the association between reported maltreatment and juvenile misconduct was examined subsequently in reference to the sex, religion, ethnic status, and family composition of the subjects; the disproportionate representation of nonwhites and the prevalence of absent fathers (41%) and mothers (15%) were discussed in relation to existing knowledge about the etiology of child abuse and neglect and the dynamics of case reporting and intervention.[9] Left open in the discussion, and unfortunately not susceptible to definitive analysis in this sample, is the extent to which the preferential selection of poor children, both for reporting for maltreatment and for delinquency, may have affected the perceived association, and the extent to which poverty *per se* may have determined both problems. Such an analysis would best be conducted on a sample generalizable to all maltreated children in New York and controlled for certain potentially confounding attributes.[29]

In the single controlled study referenced above,[3] a failure to match cases and controls on social class led to a serious confounding *by* social class in the analysis. Abusive parents were found to have a number of social and psychiatric problems in relation to the comparison group, but the contribution of a critical third factor, poverty, could not be extricated from the case-control differences, because the cases were significantly poorer than the controls. The New York State study, though impressive in numbers and worrisome in conclusions, is further difficult to interpret because it is both biased to favor poor children for selection and uncontrolled.

The contribution of Elmer brought into focus the limited state of our understanding of the long-term effects of child maltreatment.[10,11] Her findings suggested that we must attend to the social and familial circumstances that equally affected the outcomes of cases and controls. The study concluded "that the effects on child development of lower-class membership may be as powerful as abuse."[12]

Elmer's "follow-up study" (her characterization) was composed of 17 abused and 17 children who were victims of accidents, matched on age, sex, race, and socioeconomic status of their families. Each of these *traumatized* groups was matched with a group of children who had not suffered early trauma on these variables, in addition to the attribute of early hospital admission. Nine still intact *abusive families* were identified from the original case pool and were studied intensively in regard to

the stability of demographic characteristics, indices of personal and social support for parents and children, mother's behavior in relation to the child, and the following attributes of the children: health; language and hearing; perceptual-motor coordination; school ability and achievement; and behavior, focusing especially on impulsivity, aggression, and empathy.

The startling paucity of case-control differences in this study is described with candor and humor:[13]

> When the follow-up study was completed, we were at a loss to explain the lack of significant results differentiating between the abused, accident, and comparison groups or any of the subgroups. Across the board there were very few differences between the groups, and these were relatively minor. The follow-up staff was astonished and disbelieving. It then turned out that several of the examiners had kept a private tally showing their opinions of the classifications of each child. In no case had these tallies been correct any more often than would be true of selections made purely by chance. In addition, the clinicians' opinions had differed for individual children, showing that their combined judgements could not effectively differentiate the groups.

The implications of Elmer's study have been discussed elsewhere in detail in a discussion for pediatricians and others concerned with child health.[14] We noted that the findings suggest that health or social intervention alone will allay the developmental impact neither of abuse nor of poverty, for both the case and the control groups suffered impressive developmental losses, despite the provision of medical and social services.

This is not to say, however, that abuse — or poverty — dooms a child to failure. If a child and his family have available and can participate in several well-conceived and administered intervention opportunities, a child's prospect for healthy psychological growth is enhanced. Harold Martin pointed out in the summary of his book on the abused child:[15]

> We have especially focused on treatment for developmental delays and deficits, crisis care, psychotherapy and preschool or day care. . . . These various treatment modalities for the child have worked. They have made possible considerable growth and development in the abused child. They should be considered as treatment options for all abused children.

Martin's study has serious limitations, as will be addressed subsequently, but his descriptions of intervention and conclusions about their relationship to the children's development are useful and persuasive.

Such comprehensive programs for disadvantaged families as the Maternal and Infant Health programs of the Department of Health and Human Services have yielded important and encouraging results in child health and development, and analyses of the data and issues in the heredity-environment controversy suggest that a nurturant and supportive environment can permit the natural unfolding of a child's best qualities and capabilities.[16] Many materially poor families are able to provide sufficient love, stimulation, and discipline to enable their offspring to grow and develop well. But, to paraphrase a contribution to this discussion by Wolff,[17] so long as poverty persists we will have the technical wherewithal neither to anticipate nor to prevent its damaging consequences on parents and children.

In assessing the meaning of the Elmer study, it is well also to attend to the apparent developmental resiliency of the abused children, in comparison to those in the control group. The strengths of these children lead inevitably to critical questions about the pathologic orientation toward both children and parents implicit in current practice and in other research.

A critical review of the conceptual bases, design, methodology, and instrumentation of currently available work on the developmental impact of child maltreatment suggests that many investigators begin with an ominous portent of doom and select small uncontrolled samples, generally from severely impoverished populations, and examine them with psychologically-focused, loosely-quantified tools.

These reports on the physical, social, emotional, and cognitive developmental consequences of child abuse yield inescapably to an impression of serious and profound pathology in the victims, but analysis of these studies demonstrates the following major methodologic flaws that limit their generalizability, scientific validity, and utility for building theory and for guiding practice:

a. bias of selection favoring poor children[4,5,23,24,26,27]
b. sample size inadequate to form claimed associations[4,5,18,19,20,21,22,23,24,25,27,28]
c. lack of a comparison group[4,5,6,19,20,22,24,25,27,28]
d. inadequate matching of cases and members of the comparison group on socioeconomic status and other variables, leading to consequent confounding by poverty or other spurious attributes[18,23]
e. imprecise definitions of child abuse or neglect[4,5,6,18,19,20,21,22,23,24,25,27,28]
f. conceptual framework restricted to psychodynamic dimensions[4,5,6,20,25,27]

If the knowledge base on the impact of maltreatment on children appears to be insubstantial, there is no paucity of recommendations for intervention and treatment based on current presumptions and fears. These have been reviewed by us elsewhere in relation to the state of our understanding of child abuse epidemiology,[29] the principles and implications of current practice,[30] proposals to screen children for risk of maltreatment,[31] the functional implications of present classification systems for childhood illness of familial and social origin,[32] the approach to maltreatment in child health and legal policy,[16,33] the implications for social policy of child maltreatment research that focus on samples that are disproportionately representative of families who are poor, socially marginal, or of ethnic minorities,[29,30,31] and the extent to which family crisis and childhood injury has become overly professionalized.[34] In brief summary, despite the speculative nature of the prevalent conclusions about the developmental sequelae of child abuse, professional warnings support a practice of separating children from their natural homes in the interest of their and society's protection. They focus professional concern and public wrath on *the untreated families*[1] and may justify punitive action to save us from their children. The lack of knowledge, or, perhaps more accurately, the inadequate understanding of the state of knowledge promoted by the anxiety that child abuse stimulates in all of us, is translated to recommendations for intervention, many of which are heavy handed, unspecific, and insensitive, and some of which can be downright harmful.

When populations representative of all children and adults are studied in longitudinal perspective a picture of development emerges that contrasts with dismal portraits of maltreatment and its effects.

Quite different and more optimistic perspectives on children's growth, development, and adaptation to hardship are offered in the reports of the Fels Research Institute's longitudinal study,[35] in the more recent publications from the Kauai and Newcastle longitudinal studies of child development,[36,37] and in the Levinson and Vaillant studies of adult development.[38,39] Although the theoretical orientations, cultural contexts, ascertainment and follow-up intervals, and scientific instrumentation in these reports differ from one another (and the Levinson and Vaillant reports are of the development of selected, successful adult men), it is well to note briefly their principal points of convergence with our findings about health, social and psychological competence and vulnerability. These, and our, studies argue for a broadened conception of the etiology of developmental attrition, embracing social, familial, and environmental, as well as psychological dimensions.[40,41]

Several large-scale studies, employing broadly conceived, developmental conceptions of child abuse and its impact, have been granted support recently by the National Center on Child Abuse and Neglect. Their designs, and some rigorous scientific thought about the etiology and consequences of maltreatment are reported in the recent issue of *New Directions for Child Development* under the title: "Developmental Perspectives on Child Maltreatment."[42]

The Importance of Theory to Knowledge, Prevention, and Treatment of Child Abuse

Insufficient attention has been given in the child abuse literature to the theoretical construction of knowledge of the problem. Although this has in part to do with the fascination by clinicians with the bewildering variety of physical and psychological manifestations of the many problems that are characterized as child abuse or neglect, the nature of the process whereby etiologic formulations are made and tested has received scant attention. The frailty of the theory base may be more responsible for the failure of programs to treat child abuse than the lack of intervention resources.[43,44] To target adequately efforts at prevention and treatment will require first a reckoning with the etiology of child abuse. This, in turn, cannot be understood without a formal coming to terms with the assumptions implicit in various theoretical approaches.

The process of theory construction in regard to child abuse began in 1962, when Henry Kempe and his colleagues at the University of Colorado Medical Center surveyed the landscape and called to public attention something that physicians hadn't noted before – that children were being injured nonaccidentally. He called this "The Battered Child Syndrome."[45] The process began with the discrimination of a phenomenon and giving it a name.

Even though child abuse was known to exist for centuries, it was not identified as a discrete entity apart from a swirl of childhood misfortunes associated with tumult in family and society. Subsequently, hypotheses were generated about why this phenomenon occurred. At this level in the development of theory, simple cause and effect relationships were identified and unitary explanations were offered.

For example, child abuse has been explained as the direct product of parental psychopathology, criminality, and poverty. With a unitary psychodynamic theory, parental psychological characteristics are considered the primary determinants of child abuse, and must be understood in order for a treatment to take place. This theoretical orientation, in fact, guides most modern child welfare work. As with all theories, its action consequences derive from how the problem is understood. And, to a great extent, the limits of current protective service work derive from a relentless focus on individuals and a collective belief in the curative value of love and talk.

Before turning to the major theoretical approaches of child abuse and their operational consequences for treatment and prevention, it is well to reflect briefly on the uses and construction of theories.

The process of discovering pathways through experience and lenses through which that experience is viewed goes on all our lives. All human beings search for ways to understand, explain, and contain the limitless complexities of our world. We develop naive theories that are tested by experience over time. Some of our theories are better than others. Some have been grounded firmly in many experiences, some are tentative beginnings. Some may be distorted by an overextension of other theories about aspects of our experience that we think are the same, but really aren't. Some are opportunistic theories, fashioned to display an illusion of knowledge to attract for the wearer status and power. Some may be lazy theories, borrowed from others without thought about whether they really fit what we know, or without looking to see whether we really know what we think they fit.

Indeed, there is distortion implicit in any theory. In order to select, we must exclude; and our theories of what to look for limit what we see. Yet, without theories we would be helpless to select what is important from what is not, and to act purposefully in the world.

Scientific theories also involve a process of searching for pathways through experience in order to explain cause and effect. Scientific theories, however, have formal rules for testing hypotheses, rather than the rules implicit in experiential learning, and the focus of inquiry is usually more specifically disciplined. Although we may judge scientific theories on the basis of the adequacy of the formal rules that have been applied for testing their hypotheses, and their capacity to explain reality as we perceive it, the characteristics of a good theory are not dissimilar for individuals and for fields of inquiry. A good theory must first of all make sense. It must account reasonably for a good part of the data or experience. It must be plausible to other people searching for pathways through the same terrain. And it must be useful. It must enable one to operate more effectively in the world.

The explanatory theories for child abuse can be classified in two groups: Unitary and Interactive.

The Unitary theories are:

Psychology

1. Psychoanalytic: The theory posits that unconscious parental drives and conflicts determine abusive behavior.[46,47]
2. Social Learning: The theory posits that child abuse is a learned behavior.[48]

3. Cognitive Developmental: The theory posits that child abuse reflects an underlying egocentricity of the parent's understanding of the child and of the parental role.[49]

4. Environmental: The theory posits that child abuse results from social and environmental stress, with prominent attention to poverty, unemployment, inadequate housing, and a violent social milieu.[50,51]

5. Labeling: The theory posits that the interests of dominant power groups are served by defining as deviant a class of socially marginal individuals (the "child abusers") whose individual problems become the proper concerns of the helping professions.[52]

6. Criminal: Child abuse is an intentional violation of the law.[53]

Each of these unitary theories has provided a focus and generated research that has expanded our understanding of the origins of child abuse, but they are each limited to one explanatory lens on the part of a complex picture.

As a field develops in its search for an adequate theory base, the limitations of the unitary theories become clear to some thinkers. For example, with regard to psychoanalytic theories, the few controlled studies suggest that only a few of the abusing parents show severe neurotic or psychotic characteristics and that child abuse may be associated with several parental personality types.[3,54]

Even for those individuals in which individual pathology is found, the unitary psychoanalytic theory does not necessarily explain the presence of a history of child abuse. A particular psychiatric diagnosis does not predict abuse. The theory does not in itself enable a differentiation with a given diagnosis between parents who do and who do not abuse a child.

The environmental theory is also insufficiently comprehensive. Obviously, not all poor or stressed families abuse their children. A history of poverty is disproportionately represented because of the large number of lower class families who receive services from institutions that report the large majority of cases, and from which research samples are drawn.

While socioeconomic factors might sometimes place added stresses on basic personality weakness, these stresses are, of themselves, neither sufficient nor necessary causes of abuse. This model neglects *internal* sources of family strength and stress that render individual families more or less sensitive to external circumstances and events. It does not address qualities of the interaction between and among family members and their importance of a family's capacity to nurture its young, nor does it adequately account for parental dysfunction in seemingly privileged homes.

We are now at a point in the development of the field where we are moving from unitary to interactive theories of child abuse. We can recognize that a theory of psychopathology is inadequate without the integration of the factors in the individual and his or her environment that render him or her vulnerable to psychopathology and to its particular expression of child abuse. An environmental theory is inadequate without the integration of those personal and social qualities and characteristics that render the individual vulnerable as a parent to the eroding effects of poverty and stress.

An integrative approach seeks to define how one aspect of experience mediates the effects of another, in order better to understand what renders some families vulnerable and other families strong.

With the development of a field from a set of unitary theories to a set of integrative hypotheses, investigations shift in focus from trying to find *the cause* to enabling the identification of individual differences in etiology. We still need basic research into the identification of the many variables that are implicated in child abuse, but the focus is on elaboration rather than closure.

It is in what has come to be called "ecologic theory" that major strides have been made in understanding and dealing with the interrelationships among attributes of child, parent, family, and social setting. Child abuse is seen in this theoretical context as a symptom of disturbance in a complex ecosystem with many interacting variables. We and our colleagues on the Family Development Study have reported elsewhere on findings of a large epidemiologic study at the Children's Hospital in Boston, and Garbarino and Starr have reported on large data sets in New York and Michigan.[32,55,26] These studies lead to a more comprehensive understanding of child abuse, its etiology, treatment, and prevention, with a conceptualization of cause and effect that operated at different levels (individual, family, society) and with different modes of etiology for different children and families. A decade ago, Julius Richmond coined the notion of a family's ecology of health.[56] This seems now to be an especially relevant concept for the understanding and study of child abuse.

A clinical model for understanding child abuse, which draws from ecologic theory, was recently developed to enable pediatricians to organize the complex data with which they contend in clinical practice.[57]

Future Research Needs

Two recent surveys suggest substantial defects in the knowledge base on child abuse. Gelles's review of family violence research in the '70s suggests an urgent need for theory testing and building, for longitudinal study designs, for samples drawn from nonclinical populations, and for increased diversity of measurement instruments and data collection techniques.[58] Gelles subsumed child abuse in his concept of family violence, an approach that appears to be increasing in favor among researchers in the field. He summarized aptly the progress in the last decade:

> Whereas research in the sixties tended to view domestic violence as rare and confined to mentally disturbed and/or poor people, research in the seventies revealed family violence as an extensive phenomenon which could not be explained solely as a consequence of psychological factors or income (P. 873).

Garbarino surveyed 14 nationally recognized experts and concluded that "we are making some progress, but that major questions remain unanswered" (P. 1).[59] These principal research issues emerged in the Garbarino survey:

1. Incidence estimates continue to be confused by a lack of precision in the definitions used in research, policy, law, and practice. Studies of maltreated adolescents suggest different causes and consequences from cases involving younger children.

2. Identification of risk for maltreatment remains statistically unreliable, frustrating attempts at early intervention and prevention.

3. Treatment of child abuse is inadequate, and successful treatment is imperfectly understood. Conventional social work approaches are associated with high rates of reinjury, but low recidivism is reported with innovative and resourceful programs with selected clinical populations.

4. Nearly all treatment efforts focus on parents. Not only are the developmental and health needs of children ignored, but the children may be harmed by interventions that place them in foster home or institutional care settings. Focus on the childhood antecedents, precipitants, and concomitants in research and practice is limited. Poorly differentiated clinical approaches neglect the unique needs of adolescents.

5. Preventive initiatives largely are unexplored, notwithstanding, for example, the suggested potency and cost-effectiveness of facilitating the formation of bonds of parent-child attachment at birth.

6. The medium- and long-term consequences of physical and sexual abuse are poorly understood, although experts concur on the increased vulnerability for severe problems in school, in behavior in the community, and in later family life. Few longitudinal studies have begun, and these are likely soon to end because of severe constraints on research funding.

Conclusion

Clinical approaches to child abuse remain constrained by an inadequate foundation of theory and knowledge. Advances in research are not yet assembled into a set of useful guideposts for practice and policy. Well-conceived, controlled, longitudinal studies hold great promise for prevention and treatment of child abuse.

References

1. Schmitt, B., & Kempe, C. Neglect and abuse of children. In V. Vaughan & R. McKay (Eds.), *Nelson textbook of pediatrics* (10th Ed.). Philadelphia, PA: W.B. Saunders, 1975.
2. Steele, B.F., & Pollock, C.B. A psychiatric study of parents who abuse infants and small children. In R.E. Helfer & C.H. Kempe (Eds.), *The battered child* (2nd Ed.). Chicago, IL: University of Chicago Press, 1974. Pp. 80-133.
3. Smith, S.M., Hanson, R., & Noble, S. Parents of battered children: A controlled study. In A.W. Franklin (Ed.), *Concerning child abuse.* New York, NY: Churchill-Livingston, 1975.
4. Silver, L.B., Dublin, C.C., & Lourie, E.S. Does violence breed violence? Contributions from a study of the child abuse syndrome. *American Journal of Psychiatry,* 1969, 126, 404-407.
5. Galdston, R. Violence begins at home. *Journal of the American Academy of Child Psychiatry,* 1971, 10, 336-350.
6. Martin, H.P., Beezley, P., Conway, E.G., & Kempe, C.H. The development of abused children. In I. Schulman (Ed.), *Advances in pediatrics* (Vol. 21). Chicago, IL: Year Book Medical Publishers, Inc., 1974.

7. Alfaro, J. *Report on the feasibility of studying the relationship between child abuse and later socially deviant behavior.* Unpublished report. New York, NY: New York State Assembly Select Committee on Child Abuse, August 1973.
8. Alfaro, J. *Report on the relationship between child abuse and neglect and later socially deviant behavior.* Uncorrected draft of a paper presented at a symposium, Exploring the Relationship between Child Abuse and Delinquency, University of Washington, Seattle, WA, July 21-22, 1977.
9. Carr, A. *Some preliminary findings on the association between child maltreatment and juvenile misconduct in eight New York counties.* Report to the Administration for Children, Youth and Families: National Center on Child Abuse and Neglect. Processed, October 20, 1977.
10. Elmer, E. A follow-up study of traumatized children. *Pediatrics,* 1977, 59, 273.
11. Elmer, E. *Fragile families, troubled children: The aftermath of infant trauma.* Pittsburgh, PA: University of Pittsburgh Press, 1977.
12. Elmer, E. A follow-up study, *op. cit.,* p. 275.
13. Elmer, E. Fragile families, *op. cit.,* p. 80.
14. Cupoli, M., & Newberger, E. Optimism or pessimism for the victim of child abuse? *Pediatrics,* 1977, 59, 311-314.
15. Martin, H. (Ed.). *The abused child.* Cambridge, MA: Ballinger, 1976.
16. Newberger, E.H., Newberger, C.M., & Richmond J.B. Child health in America: Toward a rational public policy. *Millbank Mem. Fund Q,* 1976, 54, 249.
17. Wolff, P.H. Mother-infant interactions in the first year. *New England Journal of Medicine,* 1976, 295, 999.
18. Lynch, M. Risk factors in the child: A study of abused children and their siblings. In H. Martin (Ed.), *The abused child, op.cit.,* p. 43.
19. Blager, F., & Martin, H.P. Speech and language of abused children. In H. Martin (Ed.), *The abused child, op. cit.,* p. 83.
20. Martin, H.P., & Rodeheffer, M. Learning and intelligence. In H. Martin (Ed.), *The abused child, op. cit.,* p. 93.
21. Sandgrund, A., Gaines, R.W., & Green, A.H. Child abuse and mental retardation: A problem of cause and effect. *Journal of Mental Deficiency,* 1975, 19(3), 327-330.
22. Koel, B.S. Failure to thrive and fatal injury as a continuum. *American Journal of Diseases of Children,* 1969, 118, 51.
23. Morse, C.W., Sahler, O.J.Z., & Friedman, S.B. A three-year follow-up study of abused and neglected children. *American Journal of Diseases of Children,* 1970, 120, 439-446.
24. deCastro, F., Rolfe, U., & Heppe, M. Child abuse: An operational longitudinal study. *International Journal of Child Abuse and Neglect,* 1978, 2, 51-55.
25. Glaser, H.H., Heagarty, M.D., Bullard, D.M., Jr., & Pivchik, E.C. Physical and psychological development of children with early failure to thrive. *Journal of Pediatrics,* 1968, 73, 690-698.
26. Starr, R.H. Controlled study of the ecology of child abuse and drug abuse. *International Journal of Child Abuse and Neglect,* 1978, 2, 19-28.
27. Galdston, R. Observations of children who have been physically abused and their parents. *American Journal of Psychiatry,* 1965, 122, 440-443.

28. Caffey, J. On the theory and practice of shaking infants: Its potential residual effects of permanent brain damage and mental retardation. *American Journal of Diseases of Children,* 1972, 25, 161-169.
29. Newberger, E.H., & Daniel, J.H. Knowledge and epidemiology of child abuse: A critical review of concepts. *Pediatric Annals,* 1976, 5, 140.
30. Newberger, E.H., & Hyde, J.N. Child abuse: Principles and implications of current pediatric practice. *Pediatric Clinics of North America,* 1975, 22, 695.
31. Daniel, J.H., Newberger, E.H., Kotelchuck, M., & Reed, R.B. Child abuse screening: Limited predictive power of abuse discriminants in a controlled study of pediatric social illness. *International Journal of Child Abuse and Neglect,* 1978, 2, 247-259.
32. Newberger, E.H. *et al.* Pediatric social illness: Toward an etiologic classification. *Pediatrics,* 1977, 50, 178-185.
33. Bourne, R., & Newberger, E.H. "Family autonomy" or "coercive intervention?" Ambiguity and conflict in a proposed juvenile justice standard in child protection. *Boston University Law Review,* 1977, 57(4), 670-706.
34. Newberger, E.H., & Bourne, R. The medicalization and legalization of child abuse. *American Journal of Orthopsychiatry,* 1978, 48, 593-607.
35. Kagan, J., & Moss, H.A. *Birth to maturity: A study in psychological development.* New York, NY: Wiley, 1962.
36. Werner, E.E., & Smith, R.S. *Kauai's children come of age.* Honolulu, HI: University of Hawaii Press, 1977.
37. Miller, F.J.W., Know, E.G., Court, S.D.M., & Brandon, S. *The school years in Newcastle upon Tyne 1952-62.* London, England: Oxford University Press, 1974.
38. Levinson, D.J. *The seasons of a man's life.* New York, NY: Knopf, 1978.
39. Vaillant, G.E. *Adaptation to life.* Boston, MA: Little, Brown, 1978.
40. Cupoli, J.M., & Newberger, E.H. Optimism or pessimism: for the victim of child abuse? *Pediatrics,* 1977, 59, 311-314.
41. Morse, A.E., Hyde, J.N., Newberger, E.H., & Reed, R.B. Environmental correlates of pediatric social illness: Preventive implications of an advocacy approach. *American Journal of Public Health,* 1977, 67, 612-615.
42. Rizley, R., & Cicchetti, D. (Eds.). Developmental perspectives on child maltreatment. *New Directions for Child Development,* 1981, 11.
43. Gelles, R.J. Child abuse as psychopathology: A sociological critique and reformulation. *American Journal of Orthopsychiatry,* 1973, 43, 611-621.
44. Newberger, E.H. Child abuse and neglect: Toward a firmer foundation for practice and policy. *American Journal of Orthopsychiatry,* 1977, 47, 374-376.
45. Kempe, C.H., Silverman, F.N., Steele, B.J., *et al.* The battered child syndrome. *JAMA,* 1962, 181, 17-24.
46. Galdston, R. Violence begins at home. *Journal of the American Academy of Child Psychiatry,* 1971, 10, 336-350.
47. Steele, B.J., & Pollock, C.B. A psychiatric study of parents who abuse infants and small children. In R.E. Helfer & C.H. Kempe (Eds.), *The battered child* (2nd Ed.). Chicago, IL: University of Chicago Press, 1974. Pp. 80-133.
48. Parke, R.D., & Collmer, C.W. Child abuse: An interdisciplinary analysis. In E.M. Hetherington, *Review of child development research* (Vol. V). Chicago, IL: University of Chicago Press, 1975. Pp. 509-590.

49. Newberger, C. The cognitive structure of parenthood: Designing a descriptive measure. In R. Selman & R. Yando (Eds.), *New Directions for Child Development*, 1980, 7, 45-67.
50. Erlanger, H.S. Social class differences in parents' use of physical punishment. In S.K. Steinmetz & M.A. Straus (Eds.), *Violence in the family*. New York, NY: Dodd, Mead, 1974.
51. Pelton, L.H. Child abuse and neglect: The myth of classlessness. *American Journal of Orthopsychiatry*, 1978, 48, 608-617.
52. Pjohl, S.J. The "discovery" of child abuse. *Social Problems*, 1977, 24, 310-323.
53. Bourne, R. Child abuse and neglect: An overview. In R. Bourne & E.H. Newberger (Eds.), *Critical perspectives on child abuse*. Lexington, MA: Lexington Books, 1979. Pp. 1-14.
54. Green, A.H. A psychodynamic approach to the study and treatment of child-abusing parents. *Journal of the American Academy of Child Psychiatry*, 1976, 15, 414-429.
55. Garbarino, J. A preliminary study of some ecological correlates of child abuse: The impact of socioeconomic stress on the mother. *Child Development*, 1975, 47, 178-185.
56. Richmond, J.B., & Weinberger, H.L. Program implications of new knowledge regarding the physical, intellectual, and emotional growth and development and the unmet needs of children and youth. *American Journal of Public Health*. 1970, 60(April Supplement), 23-73.
57. Bittner, S., & Newberger, E.H. Pediatric understanding of child abuse and neglect. *Pediatrics in Review*, 1981, 2, 197-207.
58. Gelles, R.J. Violence in the family: A review of research in the seventies. *Journal of Marriage and the Family*, November 1980, 873-885.
59. Garbarino, J. *What we know about child maltreatment*. Processed, Pennsylvania State University, 1981.